

Bushfire Assessment Report

Proposed: Self Storage Units

**Denman Storage Facility,
Denman NSW**

Reference Number: 220548

9th December 2021



Prepared By:
**Building Code & Bushfire
Hazard Solutions Pty Limited**

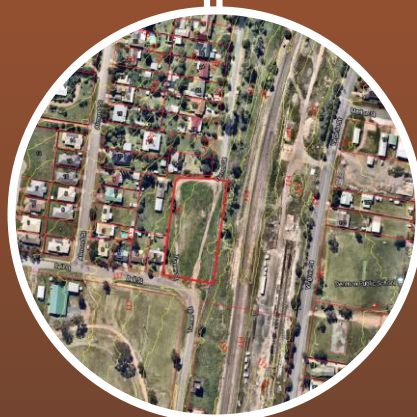
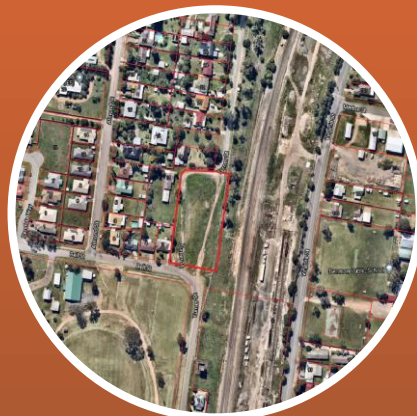
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**SILVER
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Fire Protection
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The onus is on the applicant to cross reference this document with any conditions of consent issued by Council or any requirements supplied by the NSW Rural Fire Service following development approval. BCBHS can review and cross reference these documents however the onus is on the applicant to provide them to us and request this review – Building Code and Bushfire Hazard Solutions Pty. Ltd. is not in a position to track every DA through Council and we rely upon the applicant to undertake this role as project co-ordinator.

Where any discrepancy between this document and the development approval or the NSW Rural Fire Service requirements is found, the conditions of consent always take precedence until such time as an application to review, amend or vary these conditions is approved.

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Version Control				
Version	Date	Prepared by	Reviewed by	Details
1	09/12/2021	Andrew Muirhead	Stuart McMonnies BPAD Accreditation No. 9400	Final Report

List of Abbreviations:

APZ	Asset Protection Zone
AS3959	Australian Standard 3959 – 2018 as amended
BAL	Bushfire Attack Level
BCA	Building Code of Australia
BPMs	Bushfire Protection Measures
BPLM	Bushfire Prone Land Map
Council	Muswellbrook Shire Council
DA	Development Application
ELVIS	Elevation and Depth Foundation Spatial Data – Geoscience Australia
EP&A Act	<i>Environmental Planning and Assessment Act - 1979</i>
ESD	Ecologically Sustainable Development
FRNSW	Fire and Rescue NSW
IPA	Inner Protection Area
NCC	National Construction Code
NP	National Park
NSP	Neighbourhood Safer Places
OPA	Outer Protection Area
PBP	<i>Planning for Bush Fire Protection – 2019</i>
ROW	Right of Way
RF Act	<i>Rural Fires Act - 1997</i>
RFS	NSW Rural Fire Service
SEPP	State Environmental Planning Policy
SFPP	Special Fire Protection Purpose
SWS	Static Water Supply

1.0 Introduction

Building Code and Bushfire Hazard Solutions P/L has been engaged by Conybeare Morrison International Pty Ltd to provide an independent Bushfire Assessment Report for the proposed commercial development at Lot 42 Turner Street, Denman (Lot 42 DP 771226), herein referred to as the subject site.

The development proposal seeks approval for the construction of new Self Storage Facility.

The subject site is an existing allotment with the site zoned 'RU5: Village' and is located within Muswellbrook Shire Council's local government area.

The site has street frontage to Turner Street to the north and Bell Street to the south, abuts private allotments to the west and Muswellbrook Merriwa Railway to the east.

Muswellbrook Shire Council's Bushfire Prone Land Map identifies the subject property as containing Category 3 Vegetation therefore Planning for Bush Fire Protection (PBP) must be considered.

The proposed building works are captured under section 4.14 application under the *Environmental Planning and Assessment Act 1979*.

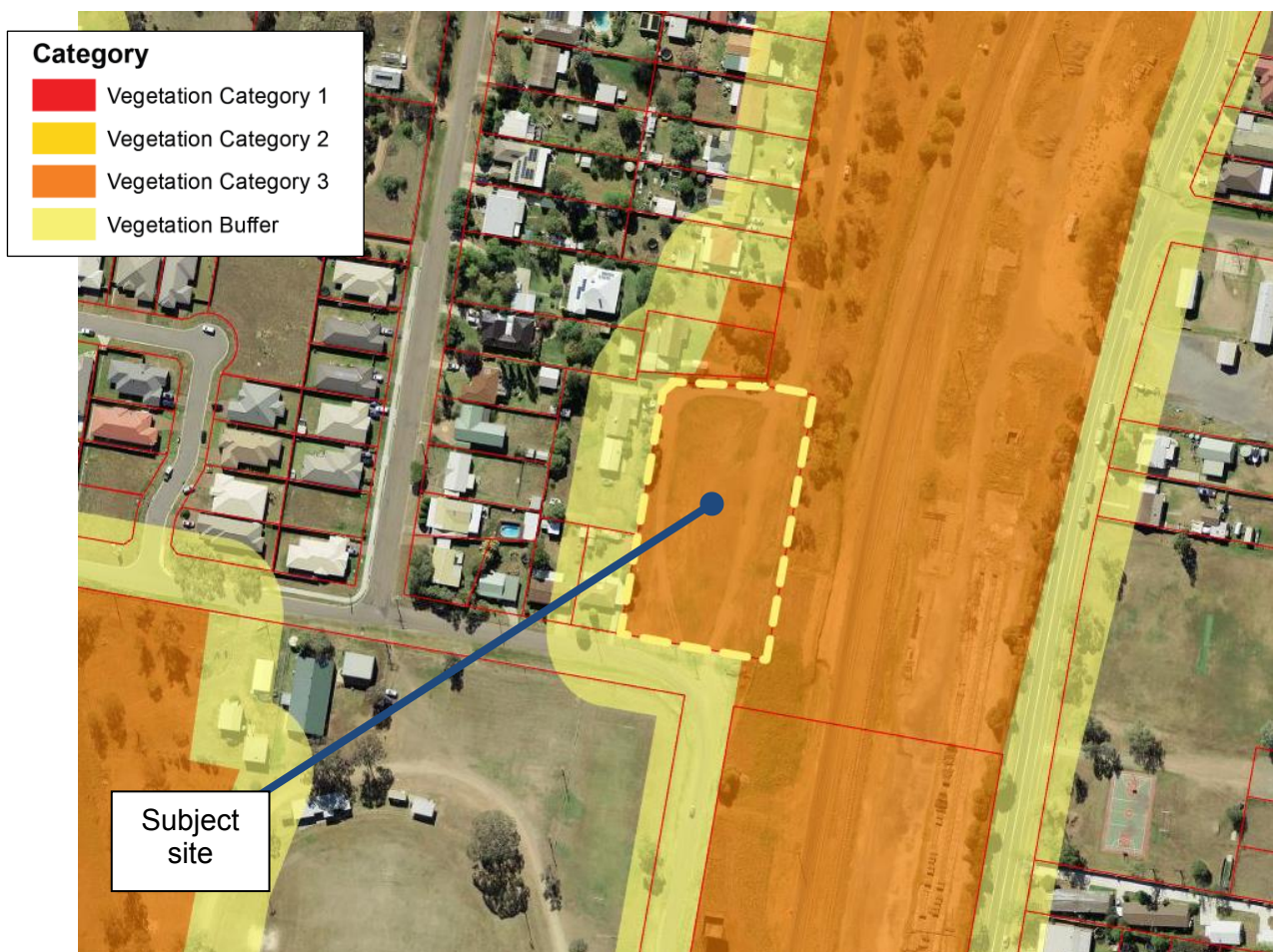


Figure 01: Extract from Muswellbrook Shire Council's Bushfire Prone Land Map

2.0 Purpose of Report

The purpose of this Bushfire Assessment Report is to provide Conybeare Morrison International Pty Ltd and Council with an independent bushfire assessment together with appropriate recommendations for both new building construction and bushfire mitigation measures considered necessary having regard to construction within a designated 'bushfire prone' area.

The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bushfire mitigation measures that Council and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject Development Application.

3.0 Scope of this Report

The scope of this report is limited to providing a bushfire assessment and recommendations for the subject property. Where reference has been made to the surrounding lands, this report does not purport to directly assess those lands; rather it may discuss bushfire impact and/or progression through those lands and possible bushfire impact to the subject property.

4.0 Compliance Tables & Notes

The following table sets out the projects compliance with *Planning for Bush Fire Protection – 2019*.

	North	East	South	West
Vegetation Structure	Managed Land	Grassland	Managed Land	Managed Land
Slope	N/A	0 degrees and across	N/A	N/A
Minimum Required Asset Protection Zone	N/A	10 metres	N/A	N/A
Proposed Asset Protection Zone	N/A	>18 metres	N/A	N/A
Significant Landscape Features	Turner Street	Muswellbrook Merriwa Railway	Bell Street	Private Residential Allotments
Bushfire Attack Level	N/A	BAL 19	N/A	N/A

* In accordance with section 8.3.10 of PBP the measures, including Asset Protection Zones, for Infill Residential Development (Chapter 7) should be used as a base for the development of a package of measures for Commercial development.

Asset Protection Zones

One of the objectives underpinning Planning for Bush Fire Protection is to provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings.

While there are no minimum required Asset Protection Zones for this type of development it is acknowledged that for commercial and industrial development PBP requires that the provisions within Chapter 7, inclusive of APZs, are to be used as the base for the package of measures.

Chapter 7 requires that APZs are provided in accordance with A1.12.2, which details the minimum APZs to achieve 29kW/m² (BAL 29).

In this instance the proposed development exceeds the minimum required Asset Protection Zone for Infill Residential Development (Chapter 7) and therefore satisfies section 8.3.10 of PBP.

All grounds within the subject site not built upon will be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

Construction Level

The highest Bushfire Attack Level to the proposed building was determined from Table A1.12.5 of PBP to be 'BAL 19'.

The National Construction Code does not provide for any bush fire specific performance requirements for Class 5 to 8 structures and as such Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2018 does not apply as a set of 'deemed to satisfy' provisions.

Section 8.3.1 of PBP 2019 states:

Whilst bush fire is not captured in the NCC for Class 5-8 buildings, the following objectives will be applied in relation to access, water and services, and emergency and evacuation planning:

- *to provide safe access to/from the public road system for firefighters providing property protection during a bush fire and for occupant egress for evacuation;*
- *to provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;*
- *to provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building; and*
- *provide for the storage of hazardous materials away from the hazard wherever possible.*

The general fire safety construction provisions (of the NCC) are taken as acceptable solutions however construction requirements for bush fire protection will need to be considered on a case-by-case basis.

We are satisfied that in combination with the recommendations contained within this assessment that the proposal will satisfy the above objectives.

Compliance Summary of Bushfire Protection Measures Assessed			
Bushfire Protection Measure (Chapter 7)	Acceptable Solution	Performance Solution	Report Section
Asset Protection Zones	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.02
Building construction, siting & design	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.03
Access	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.04
Water Supply & Utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.05
Emergency management arrangements	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.06
Landscaping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7.07

5.0 Aerial view of the subject allotment

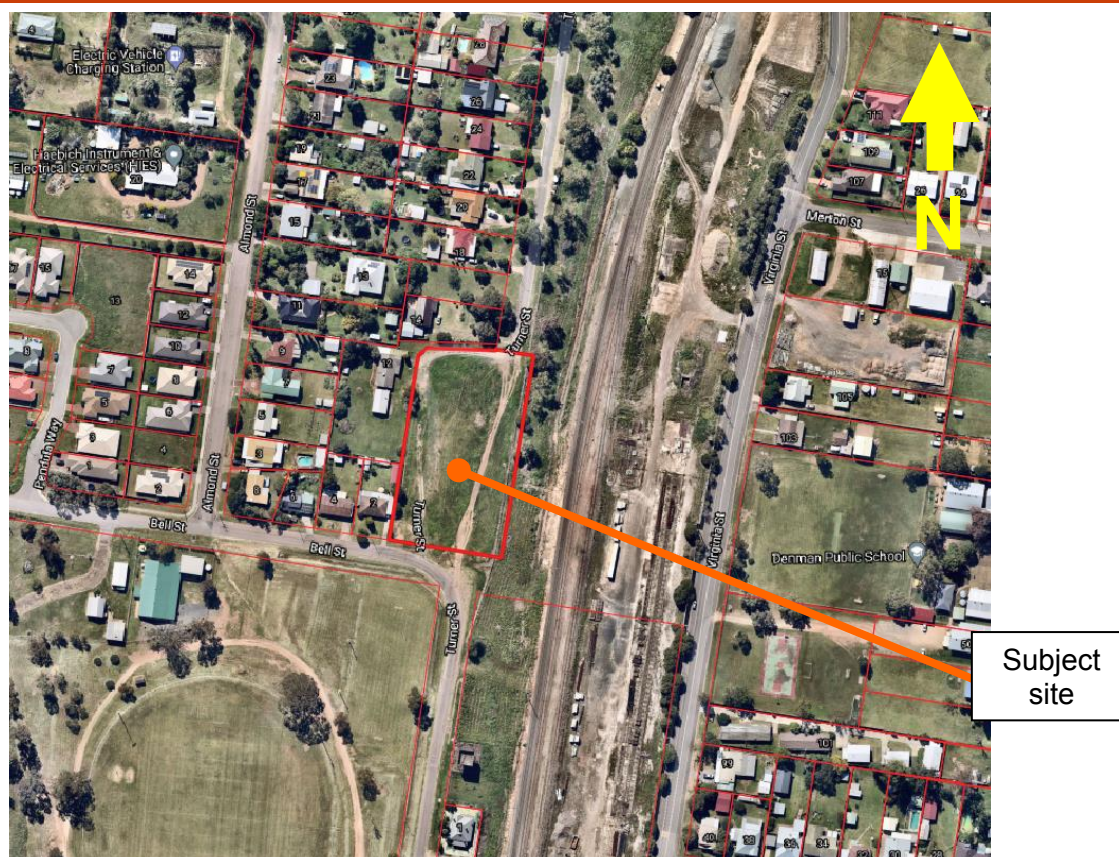


Figure 02: Aerial view of the subject area courtesy Nearmap

6.0 Site Assessment

6.01 Location

The subject site is an existing allotment located at Lot 42 Turner Street, Denman (Lot 42 DP 771226).

The subject site is an existing allotment with the site zoned 'RU5: Village' and is located within Muswellbrook Shire Council's local government area.

The subject site has street frontage to Turner Street to the north and Bell Street to the south and abuts private residential allotments to the west and Muswellbrook Merriwa Railway to the east.

The vegetation identified as being the potential bushfire hazard is within the Muswellbrook Merriwa Railway easement to the east.



Photograph 01: View towards the subject site

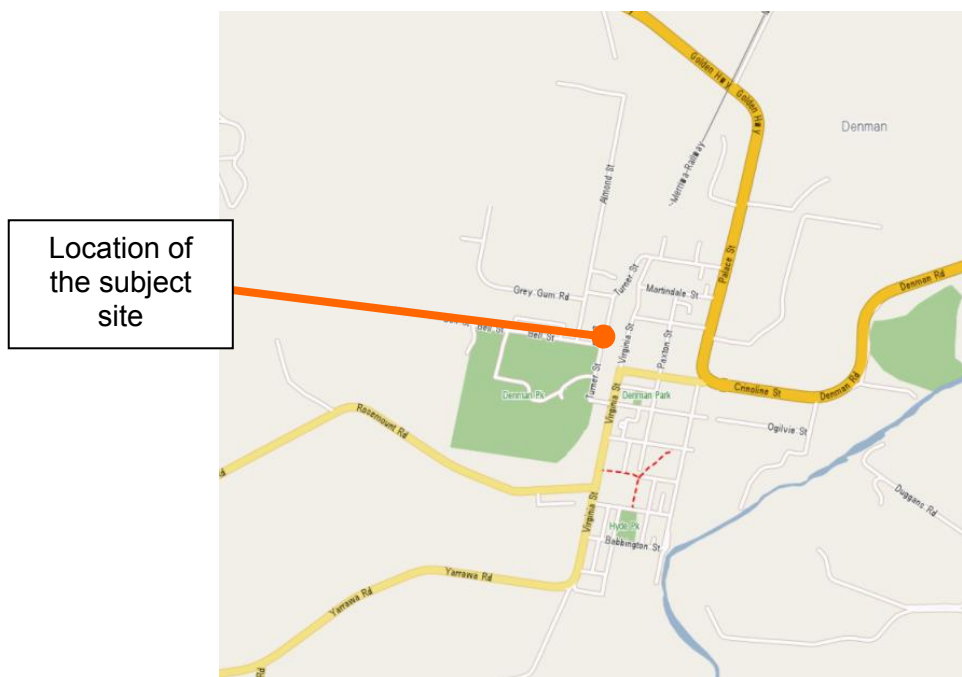


Figure 03: Extract from street-directory.com.au

6.02 Vegetation

In accordance with Appendix 1 'Site Assessment Methodology' of PBP we have undertaken an assessment of all vegetation formations within 140 metres of the development site for each aspect as per Keith (2004).

The vegetation identified as being the potential bushfire hazard is within the Muswellbrook Merriwa Railway easement to the east.

The vegetation posing a hazard was found to consist of tall grasses.

In accordance with Appendix 1 of PBP the vegetation posing a hazard was determined to be grassland to the east.



Grassland

Photograph 02: View east across Muswellbrook Merriwa Railway easement



Grassland

Photograph 03: View east across Muswellbrook Merriwa Railway easement

6.03 Slope and Topography

The slope of the land under the classified vegetation has a direct influence on the forward rate of spread, fire intensity and radiant heat exposure. The effective slope is considered to be the slope under the classified vegetation which will most significantly influence bushfire behaviour toward the development site.

In accordance with A1.4 'Determine slope' of PBP the slope assessment is to be derived from the most detailed contour data available.

The slope that would most significantly influence grassfire behaviour was determined from topographic imagery (1 metre contours) in conjunction with site observations to be:

- 0 degrees and across within the hazard to the east

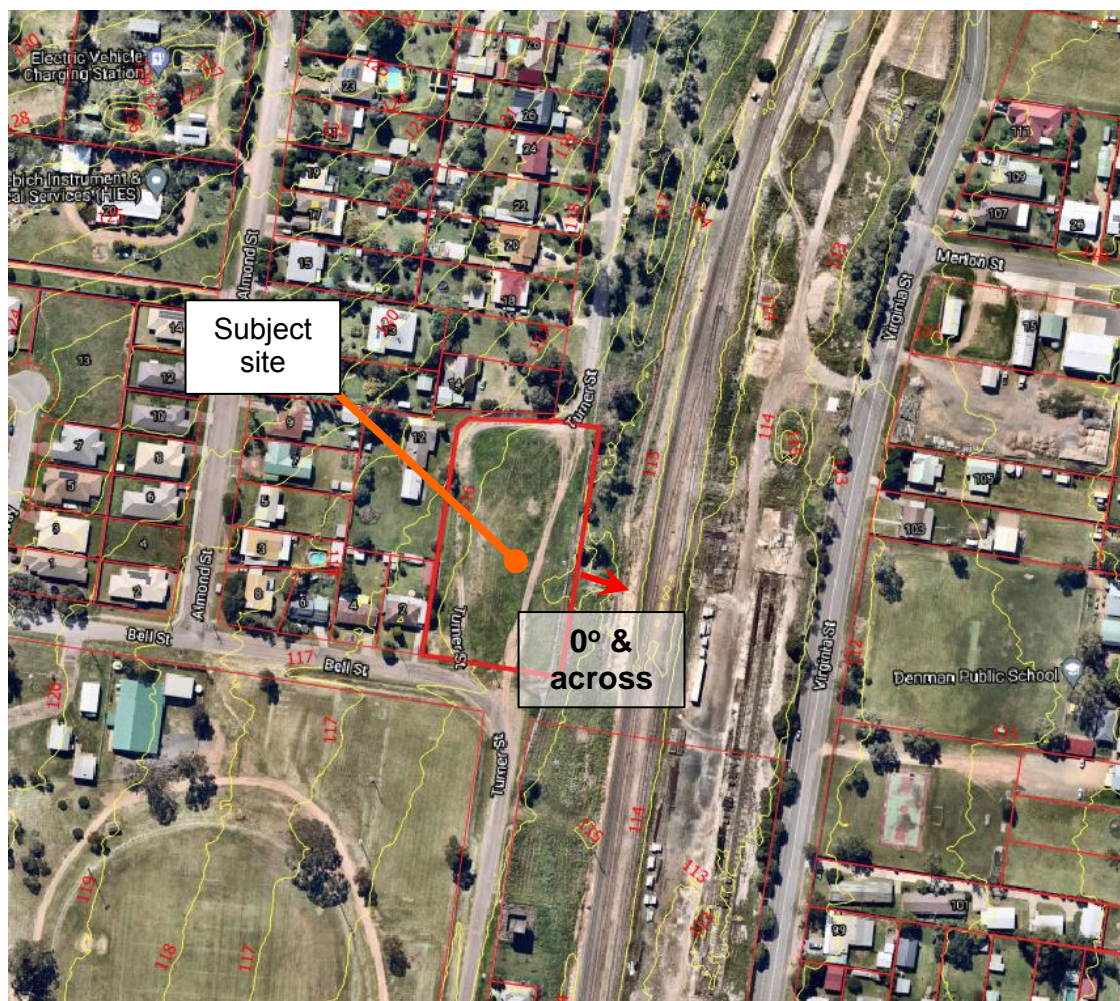


Figure 04: Extract from ELVIS – Geoscience Australia (1 metre Contours)

7.0 Bushfire Protection Measures

7.01 Planning for Bush Fire Protection - 2019

Planning for Bush Fire Protection – 2019 (PBP) is applicable to development located on land determined as being 'bushfire prone' in accordance with the local Bushfire Prone Land Map.

Bushfire prone land are defined as those areas;

- containing or within 100m of Category 1 Vegetation; or
- containing or within 30m of Category 2 Vegetation.

Muswellbrook Shire Council's Bushfire Prone Land Map identifies the subject property as containing Category 3 Vegetation therefore Planning for Bush Fire Protection (PBP) must be considered.

The application of Planning for Bush Fire Protection requires satisfactory demonstration of the aim and objectives and the following bushfire protection measures (BPMs):

- Asset Protection Zones
- Building construction, siting & design
- Access arrangements
- Water supply & utilities
- Emergency management arrangements
- Landscaping

As the proposal relates to commercial development the proposal must comply with Section 8.3.1 and the aim and objectives of PBP.

7.02 Asset Protection Zones

One of the objectives underpinning Planning for Bush Fire Protection is to provide appropriate separation between a hazard and buildings which, in combination with other measures, prevent the likely fire spread to buildings.

While there are no minimum required Asset Protection Zones for this type of development it is acknowledged that for commercial and industrial development PBP requires that the provisions within Chapter 7, inclusive of APZs, are to be used as the base for the package of measures.

Chapter 7 requires that APZs are provided in accordance with A1.12.2, which details the minimum APZs to achieve 29kW/m² (BAL 29).

In this instance the proposed development exceeds the minimum required Asset Protection Zone for Infill Residential Development (Chapter 7) and therefore satisfies section 8.3.10 of PBP.

All grounds within the subject site not built upon will be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

7.03 Building construction, siting & design

Australian Standard 3959 – 2018 'Construction of buildings in bushfire-prone areas' (AS3959) specifies construction standards for buildings within various Bushfire Attack Levels as determined by Planning for Bush Fire Protection – 2019.

AS3959 provides for six (6) levels of building construction these being BAL - Low, BAL - 12.5, BAL - 19, BAL - 29, BAL - 40 and BAL - FZ.

Bushfire Attack Level	Maximum radiant heat impact (kW/m ²)	Level of construction under AS3959
Low		No special construction requirements
12.5	≤12.5	BAL - 12.5
19	12.6 to 19.0	BAL - 19
29	19.1 to 29.0	BAL - 29
40	29.1 to 40.0	BAL - 40
Flame Zone	>40.0	BAL FZ No deemed to satisfy provisions

Table 01: Correlation between bushfire impact and AS3959

The highest Bushfire Attack Level to the proposed building was determined from Table A1.12.5 of PBP to be 'BAL 19'.

The National Construction Code does not provide for any bush fire specific performance requirements for Class 5 to 8 structures and as such Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2018 does not apply as a set of 'deemed to satisfy' provisions.

Section 8.3.1 of PBP 2019 states:

Whilst bush fire is not captured in the NCC for Class 5-8 buildings, the following objectives will be applied in relation to access, water and services, and emergency and evacuation planning:

- *to provide safe access to/from the public road system for firefighters providing property protection during a bush fire and for occupant egress for evacuation;*
- *to provide suitable emergency and evacuation (and relocation) arrangements for occupants of the development;*
- *to provide adequate services of water for the protection of buildings during and after the passage of bush fire, and to locate gas and electricity so as not to contribute to the risk of fire to a building; and*
- *provide for the storage of hazardous materials away from the hazard wherever possible.*

The general fire safety construction provisions (of the NCC) are taken as acceptable solutions however construction requirements for bush fire protection will need to be considered on a case-by-case basis.

We are satisfied that in combination with the recommendations contained within this assessment that the proposal will satisfy the above objectives.

In considering the application of any additional construction measures to mitigate bushfire impact the following inclusions in the proposal was noted:

- Colorbond walls,
- Colorbond roofing,
- Non-combustible carports
- Colorbond fencing

In consideration of the above measures we have recommended a package to mitigate ember attack. This includes screening operable windows, screening or enclosing all gaps >3mm in size, installing draught excluders on external side-hung doors, fitting external roller doors with relevant seals and added protection on any ducted air ventilation systems.

In relation to the building design the proposal does not include a complex roof design or unnecessary re-entrant corners. We are therefore satisfied with the design of the proposed building from a bushfire planning perspective.

7.04 Property Access

The subject site has street frontage and access to Turner Street to the north and Bell Street to the south.

Persons seeking to egress the subject property are able to do so via Turner Street or Bell Street.

The proposal includes a >6 metre wide one way access road that exceeds the minimum requirements for non-perimeter roads. The rail corridor has access trails from Turner Street and along the corridor providing access to the western hazard.

It is of our opinion that the proposed access arrangements provide safe access to/from the public road system for firefighters providing property protection during a bushfire and for occupant egress or evacuation.

7.05 Water Supply & Utilities

There are in-ground hydrants available along Turner Street and surrounding streets for the replenishment of attending fire services.

The existing water supply is considered adequate for the needs of attending fire services.

Any new hydrants / hose reels must comply with AS2419.

Any new gas and electrical connections must comply with Table 7.4a of PBP.

7.06 Emergency management arrangements

Evacuation is possible by utilising existing road infrastructure.

It is recommended that the operators of the building complete a Bush Fire Survival Plan. The template for this plan is available at <https://www.rfs.nsw.gov.au/resources/bush-fire-survival-plan>.

7.07 Landscaping

Any new landscaping must comply with Section 3.7 'Landscaping' and Appendix 4 of *Planning for Bush Fire Protection* 2019.

7.08 Aim & Objectives of PBP

The National Construction Code (NCC) does not provide for any bush fire specific performance requirements for Class 5 to 8 buildings and as such Australian Standard 3959 'Construction of buildings in bushfire-prone areas' 2009 (AS3959) does not apply as a set of 'deemed to satisfy' provisions.

The application of AS 3959 should be considered when meeting the aim and objectives of PBP.

The following table details the aim and objectives of Planning for Bush Fire Protection 2019 and the proposals ability to comply.

Aim / Objective	Comment
The aim of PBP is to provide for the protection of human life and minimise impacts on property from the threat of bush fire, while having due regard to development potential, site characteristics and protection of the environment.	With the inclusion of the recommendations made herein it is of our opinion that the aim of PBP has been satisfied.
(i) afford buildings and their occupants protection from exposure to a bush fire;	Asset Protection Zones have been provided consistent with the requirements for residential development in accordance with s8.3.10 of PBP.
(ii) provide for a defensible space to be located around buildings;	The proposed access road provides a logical fire-fighting area and defensible space for attending fire services if required.
(iii) provide appropriate separation between a hazard and buildings which, in combination with other measures minimise material ignition;	The Asset Protection Zones to the proposed building, coupled with the construction recommendations, provides for appropriate setbacks and minimises potential material ignition.
(iv) ensure that appropriate operational access and egress for emergency service personnel and residents is available;	The existing access arrangements have been reviewed and are considered adequate for fire-fighter access and occupant evacuation.
(v) provide for ongoing management and maintenance of bush fire protection measures, (BPMs); and	All APZs within the subject site will continue to be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of Planning for Bush Fire Protection 2019 and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'. Any future Landscaping is to comply with the provisions of Table 7.4a and Appendix 4 of PBP.

Aim / Objective	Comment
(vi) ensure that utility services are adequate to meet the needs of firefighters.	The existing hydrants within Turner Street are considered adequate for the replenishment of attending fire services.

It is therefore of our opinion that the proposal can satisfactorily comply with the aim and objectives of Planning for Bush Fire Protection 2019.

8.0 Recommendations

The following recommendations are provided as the minimum necessary for compliance with *Planning for Bush Fire Protection 2019*. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

Asset Protection Zones

1. All grounds within the subject site and not built upon shall be maintained in accordance with an Inner Protection Area as detailed in Appendix 4 of *Planning for Bush Fire Protection 2019* and the NSW Rural Fire Service publication 'Standards for Asset Protection Zones'.

Construction

2. That all gaps >3mm or more on proposed building be either screened within aluminium, steel or bronze metal mesh having an aperture size of ≤2mm or be sealed / closed.
3. That all operable windows be screened internally or externally with aluminium, steel or bronze metal mesh having an aperture size of ≤2mm in such a way that the entire opening is screened when in the open position.
4. That the external side-hung doors on proposed building be tight fitting and fitted with a draft excluder. This may require draft excluders on the stiles, head, sill or threshold and rebated or planted jambs & centre stiles.
5. That the external roller doors on proposed building have tight fitting guide tracks / seals (not providing a gap >3mm when in the closed position).
6. That any mechanical ducted ventilation on proposed building provides screens over air intake vents and ensuring that exhaust vents are either screened or fitted with dampers that close when positive outward air pressure is lost to ensure the maintain ember protection to the inside of the building.

Emergency management

7. That the occupants of the subject dwelling complete a Bush Fire Survival Plan.

Gas

8. Location and design of gas services will not lead to ignition of surrounding bushland or the fabric of buildings.
 - reticulated or bottled gas is installed and maintained in accordance with AS/NZS 1596:2014 and the requirements of relevant authorities,
 - and metal piping is used;
 - all fixed gas cylinders are kept clear of all flammable materials to a distance of 10m and shielded on the hazard side;
 - connections to and from gas cylinders are metal;
 - polymer-sheathed flexible gas supply lines are not used; and
 - above-ground gas service pipes are metal, including and up to any outlets.

9.0 Conclusion

Given that the property is deemed bushfire prone under Muswellbrook Shire Council's Bushfire Prone Land Map any development would need to meet the requirements of *Planning for Bush Fire Protection*. The determination of any bushfire hazard must be made on a site-specific basis that includes an assessment of the local bushland area and its possible impact to the subject property.

We are of the opinion that the proposed development satisfies the relevant specifications and requirements of Planning for Bush Fire Protection 2019.

In accordance with the bushfire safety measures contained in this report, and consideration of the site specific bushfire risk assessment it is our opinion that when combined, they will provide a reasonable and satisfactory level of bushfire protection to the subject development.

We are therefore in support of the development application.

Should you have any enquiries regarding this project please contact me at our office.

Prepared by
Building Code & Bushfire Hazard Solutions P/L



Andrew Muirhead

Bushfire Consultant
Diploma of Engineering

Reviewed and endorsed by
Building Code & Bushfire Hazard Solutions P/L



Stuart McMonnies

Manager Bushfire Section
G. D. Design in Bushfire Prone Areas.
Certificate IV Fire Technology
Fire Protection Association of Australia BPAD – L3 Accredited Practitioner
Certification number – BPAD 9400



10.0 Annexure 01

List of Referenced Documents

Australian Building Codes Board (2019). *National Construction Code Volume One - Building Code of Australia*. ABCB

ELVIS -Elevation -Foundation Spatial Data. Elevation.fsdf.org.au. Available at: <http://elevation.fsdf.org.au/>

Keith, D. (2004). "Ocean Shores to Desert Dunes" Department of Environment and Conservation, Sydney

NSW Department of Planning and Environment (2019). *Planning Portal*. Accessed at: <https://www.planningportal.nsw.gov.au/>

NSW Department of Planning and Environment (2019). *Planning Portal*. Accessed at: <https://www.planningportal.nsw.gov.au/>

NSW Rural Fire Service (2019). *Planning for Bushfire Protection. A Guide for Councils, Planners, Fire Authorities and Developers*.

Proposed Plans for Conybeare Morrison International P/L, Project No 20034, Revision E, Date 01/09/21

Resources and Energy NSW (2016). *ISSC3 Guideline for Managing Vegetation Near Power Lines*

Rural Fire Service NSW (2005). *Standards for Asset Protection Zones*

Standards Australia (2018). *AS3959, Construction of buildings in bushfire-prone areas*.

Standards Australia (2014). *AS/NZS 1596 The storage and handling of LP Gas*

Standards Australia (2005). *AS 2419.1 Fire hydrant installations – System design, installation and commissioning*

Acknowledgements to:

Geoscience Australia
NSW Department of Lands – SIXMaps
Nearmap.com
Street-directory.com.au

Attachments

Attachment 01: S4.14 Certificate



Bushfire Hazard Solutions

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BUSHFIRE RISK ASSESSMENT CERTIFICATE UNDER PART 4 DIVISION 4.3 SECTION 4.14 OF THE EP&A ACT 1979 NO 203

PROPERTY ADDRESS:	Lot 42 Turner Street, Denman
DESCRIPTION OF PROPOSAL:	Self Storage Units
PLAN REFERENCE: (relied upon in report preparation)	Site Plan prepared by Conybeare Morrison International P/L, Project No 20034, Revision E, Date 01/09/21.
BAL RATING:	BAL 19
BUSHFIRE ASSESSMENT REPORT REFERENCE:	220548
REPORT DATE	9 th December 2021
CERTIFICATION NO/ACCREDITED SCHEME	BPAD9400

I Stuart McMonnies of Building Code and Bushfire Hazard Solutions Pty Ltd hereby certify, in accordance with Part 4 Division 4.3 Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*:

1. That I am a person recognised by the *NSW Rural Fire Service* as a qualified consultant in bushfire risk assessment; and
2. That subject to the recommendations contained in the Bushfire Risk Assessment Report the proposed development conforms specifications and requirements of the documents entitled *Planning for Bush Fire Protection* prepared by the NSW Rural Fire Service in co-operation with the Department of Planning and any other documents as prescribed by Part 4 Division 4.3 Section 4.14 of the *Environmental Planning and Assessment Act 1979 No 203*.

I am aware that the Bushfire Assessment Report, prepared for the above mentioned site is to be submitted in support of a development application for this site and will be relied upon by Council as the basis for ensuring that the bushfire risk management aspects of the proposed development have been addressed in accordance with *Planning for Bush Fire Protection 2019*.

Signature:  Date: 9th December 2021

